

# ATTACHMENT H

TBA - Health Goal Effects

## Office of Environmental Health Hazard Assessment

Joan E. Denton, Ph.D., Director

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DAB

Reg

Winston H. Trites  
Secretary for  
Environmental  
ProtectionCraig Davis  
Governor

## MEMORANDUM

**TO:** David P. Spath, Ph.D., P.E., Chief  
Division of Drinking Water and Environmental Management  
Department of Health Services  
601 North 7<sup>th</sup> Street, 2<sup>nd</sup> Floor  
Sacramento, CA 94234-7320

6/11/99  
TO: HEATHER COLLINS  
DHS  
FROM: STEVE BOOK  
4 pages.

**FROM:** George V. Alexeeff, Ph.D., DABT  
Deputy Director for Scientific Affairs

**DATE:** June 2, 1999

**SUBJECT:** EXPEDITED EVALUATION OF RISK ASSESSMENT FOR TERTIARY BUTYL ALCOHOL IN DRINKING WATER.

In response to your request of May 19, 1999, we have summarized an interim assessment that the Office of Environmental Health Hazard Assessment (OEHHHA) staff made last year in connection with our assessment of methyl tertiary butyl ether (MTBE) and based on limited data available at that time. While this is still an interim assessment with preliminary calculations, and by no means represents a full risk assessment, it may be suitable for the purposes stated in your request.

Tertiary butyl alcohol (TBA) has been used as a gasoline octane booster and may be a food contaminant when used in coatings for metallic items that contact food, or as a coating for paperboard food containers. Human exposure can occur via skin contact, inhalation, or ingestion. The Occupational Safety and Health Administration has established a permissible exposure limit of 100 ppm or 300 mg/m<sup>3</sup> for TBA. TBA is partially metabolized via demethylation in rats to acetone and formaldehyde. TBA is a metabolite of MTBE and exposure may occur through inhalation of MTBE fumes.

Compared to MTBE, relatively little toxicity data are available for TBA. A bioassay was conducted by the National Toxicology Program (NTP) in Fischer 344 rats and B6C3F1 mice exposed to TBA in drinking water (NTP, 1994; Cirvello et al., 1995). Groups of 60 F-344 rats were administered daily doses via drinking water of approximately 0, 85, 195, and 420 mg/kg-d in males and 0, 175, 330, and 650 mg/kg-d in females. Ten animals in each group were sacrificed at 15 months for evaluation; the remainder was exposed until the study was terminated at 103 weeks. The high dose groups of both sexes experienced decreased survival. Dose-related decrease in body weight gain was also observed. All treated groups of females showed a

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dose-related increase in kidney weight at the 15-month evaluation. Males exhibited increased kidney weight at the mid and high doses. Nephropathy was seen in all groups of treated females and caused early mortality in high exposure groups. The study did not identify a NOAEL for chronic TBA toxicity in the rat.

At the 24-month termination of the rat bioassay, the combined incidences of adenomas and carcinoma of the renal tubules were found in 8/50, 13/50, 19/50, and 13/50 of the control, low, mid and high dose male groups, respectively. The increased incidence in the mid dose group was statistically significant ( $p = 0.01$ ) by Fisher's exact test. The increased mortality in the high dose group may have reduced the observed incidence of renal tumors. The incidence of renal tubule hyperplasia was elevated in all treatment groups. Although no renal (or other) tumors were observed in female rats, the incidence of renal hyperplasia was significantly elevated in the high dose group. No renal tubule adenoma or carcinoma was observed in 227 control male rats in the four studies comprising the recent NTP historical control database for drinking water studies indicating the rarity of these neoplasms in male rats. The pathogenesis of proliferative lesions of renal tubule epithelium is thought to proceed from hyperplasia to adenoma to carcinoma (Cirvello et al., 1995). The incidence of renal tubule hyperplasia, adenoma and carcinoma was increased in all treated male groups.

Groups of 60 B6C3F1 mice of each sex were administered TBA in drinking water at doses of approximately 0, 535, 1035, and 2065 mg/kg-d in males and 0, 510, 1015, and 2105 mg/kg-d in females. Reduced survival was observed in the high dose groups. The incidence of thyroid follicular cell hyperplasia was significantly elevated in all treatment groups of males (5/60, 18/59, 13/59, 18/57) and in the mid and high dose groups of females (19/58, 28/60, 33/59, 47/59). Follicular cell adenomas were significantly higher in high dose females (9/59). Chronic urinary bladder inflammation was seen in both sexes at the high dose, but no urinary bladder neoplasias were observed. No NOAEL was identified for chronic TBA toxicity in the mouse.

In conclusion, the increased incidence of renal tubule adenoma or carcinoma, combined, in male rats and of thyroid gland follicular cell adenoma in female mice is evidence of a carcinogenic response to TBA.

TBA has been reported as negative in the *Salmonella typhimurium* mutagenicity test, in a chromosome aberrations test in cultured Chinese hamster ovary (CHO) cells, in a sister chromatid exchange test in CHO cells, and in a mutation test in cultured mouse lymphoma cells (Gold and Zeiger, 1997).

Due to the limited data available, the interim assessment for human consumption will be based on the rat cancer bioassay noted above. Since no mode of carcinogenic action has been established for TBA, and following the U.S. EPA's 1996 Proposed Guidelines for Carcinogen Risk Assessment (FR60: 17960-18011, 4/21/96), a low dose linear dose-response approach will be applied to the data for male rat kidney adenoma and carcinoma. The analysis is summarized in Table 1.

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study ↓ sex, species ↓ doses, tumor incidences ↓ dose response

Table 1. Dose Response Assessment of Tertiary Butyl Alcohol for Rat Kidney Tumors

Study	Sex, Species	Dose, Tumor Incidences	Dose Response	LMS Q <sub>1</sub> <sup>a</sup> (mg/kg-d) <sup>-1</sup>	ED <sub>10</sub> , LED <sub>10</sub> (mg/kg-d)	CSF (mg/kg-d) <sup>-1</sup>	C, mg/L
NTP, 1994; Cirvello et al., 1995	Male Fischer 344 Rat	0, 85, 195, 420 mg/kg-d; 8/50, 13/50, 19/50 (p<0.01), 13/50	5.12, 0.08, 3	3.3E-3	75.9; 30.4	3.0E-3	1.1E-2

Note: Dose response assessment performed with Tox\_Risk v 3.5 and body weight % power scaling to human equivalent.

As can be seen in Table 1, the dose response fit was adequate exceeding the Chi-square fit criterion of  $p \geq 0.05$ . The ED<sub>10</sub> is the maximum likelihood estimate of the dose giving a 10% tumor response and the LED<sub>10</sub> is the 95% lower bound on that dose. The carcinogen slope factor (CSF) is simply the risk 0.1 divided by the LED<sub>10</sub> or 3.3E-3 (mg/kg-d)<sup>-1</sup>. The drinking water interim assessment concentration (C) is calculated as follows:

$$C = \frac{70 \text{ kg} \times 10^{-6}}{3.0 \times 10^{-3} (\text{mg/kg-d})^{-1} \times 2 \text{ L/d}} = 0.0117 \text{ mg/L}$$

$$C = 0.012 \text{ mg/L (rounded)} = 12 \text{ } \mu\text{g/L}$$

Where: 10<sup>-6</sup> is the negligible lifetime extra cancer risk criterion;  
 70 kg is the average human body weight,  
 3.3 x 10<sup>-3</sup> (mg/kg-d)<sup>-1</sup> is the human carcinogen slope factor (CSF);  
 2L/d is the average daily human total water consumption.

It should be noted that this calculation addresses exposures to TBA via the oral route only. As noted above, other sources besides water as well as other routes besides oral may be involved in human exposures to TBA.

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**References:**

NTP. (1994). *Toxicology and Carcinogenesis Studies of t-Butyl Alcohol (CAS No. 75-65-0) in F344/N Rats and B6C3F<sub>1</sub> Mice*. National Toxicology Program, Technical Report No. 436, National Institutes of Health, Public Health Service, U.S. Department of Health and Human Services, Research Triangle Park, NC.

Cirvello JD, Radovsky A, Heath JE, Farnell DR, and Lindamood III C. (1995). Toxicity and carcinogenicity of t-butyl alcohol in rats and mice following chronic exposure in drinking water. *Toxicol Indus Health* 11:151-165.

Gold LS and Zeiger, E eds. (1997). *Handbook of Carcinogenic Potency and Genotoxicity Databases*. CRC Press, Boca Raton, FL.

If you need any additional information about this analysis, please call me at (510) 622-3202.

cc: Joan E. Demon, Ph.D., Director, OEHHA  
Val F. Siebal, Chief Deputy Director, OEHHA  
Anna M. Fan, Ph.D., Chief, PETS/OEHHA  
Joseph P. Brown, Ph.D., PETS/OEHHA

## **California Drinking Water Standards, Action Levels, and Unregulated Chemicals Requiring Monitoring**

Last Update: June 4, 1999

Maximum Contaminant Levels (MCLs) are primary and secondary drinking water standards. They are enforceable regulatory levels under the Safe Drinking Water Act, and must be met by all public drinking water systems to which they apply. MCLs are part of California's drinking water regulations, which can be downloaded from the Division of Drinking Water and Environmental Management [download page](#).

Primary MCLs (Table 1) are established for a number of chemical and radioactive contaminants. Primary MCLs can be found in Title 22 California Code of Regulations (CCR) for inorganic chemicals (§64431), trihalomethanes (§64439), radioactivity (§64441 and §64443) and organic chemicals (§64444).

Lead and copper (Table 2) have specific regulations in 22 CCR, Chapter 17.5 §64670, *et seq.* The lead and copper regulations use the term "action level" for each substance, for purposes of regulatory compliance. These action levels should not be confused with the advisory action levels for other unregulated chemical contaminants, as described below.

Secondary MCLs (Table 3) are established for a number of chemicals or characteristics. They are set for taste, odor, or appearance of drinking water, and are presented in 22 CCR §64449.

Action Levels (ALs) (Table 4)—except for lead and copper, as described above—are health-based advisory levels for chemicals for which primary MCLs have not been established. They are not enforceable standards. DHS recommends that drinking water systems provide public notification if ALs are exceeded. If sources exceeding ALs are taken out of service, customer notification is not needed. Drinking water systems are required to notify local governing agencies (*i.e.*, city council and/or county board of supervisors) whenever an AL is exceeded in a drinking water well, even if the well is taken out of service (Health & Safety Code §116455).

Unregulated chemicals requiring monitoring (Table 5). Some chemicals are "unregulated" but nonetheless have certain monitoring requirements, as set forth in 22 CCR §64450. There are a number of unregulated chemicals that are or may be required to be monitored, depending on the vulnerability of drinking water systems.

Detection of chemicals in drinking water supplies is defined by the detection levels for purposes of reporting (DLRs).

Zinc	5.0
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<sup>f</sup> MTBE also has an action level of 0.013 mg/L.

<sup>g</sup> Thiobencarb also has a primary MCL of 0.07 mg/L

Constituent	Secondary MCL Ranges		
	Recommended	Upper	Short Term
Total Dissolved Solids, or	500	1,000	1,500
Specific Conductance, micromhos	900	1,600	2,200
Chloride	250	500	600
Sulfate	250	500	600

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TABLE 4. CALIFORNIA DRINKING WATER ACTION LEVELS  
[All values in milligrams per liter (mg/L).]

Contaminant	Action Level
<i>Inorganic Chemicals</i>	
Boron	1
Perchlorate	0.018
<i>Organic Chemicals</i>	
Aldicarb (Temik) <sup>h</sup>	0.01
Aldrin <sup>h</sup>	0.00005
Baygon	0.090

a-Benzene Hexachloride (a-BHC)	0.0007
b-Benzene Hexachloride (b-BHC)	0.0003
n-Butylbenzene (1-Butylpropane) <sup>h</sup>	0.045
Captan	0.350
Carbaryl (Sevin) <sup>h</sup>	0.060
Chloropicrin	0.050(0.037) <sup>j</sup>
2-Chlorotoluene (o-Chlorotoluene) <sup>h</sup>	0.045
4-Chlorotoluene (p-chlorotoluene) <sup>h</sup>	0.045
Diazinon (Basudin, Neocidol)	0.014
1,2-Dichlorobenzene (o-Dichlorobenzene)	0.130(0.010) <sup>k</sup>
1,3-Dichlorobenzene (m-Dichlorobenzene)	0.130(0.020) <sup>k</sup>
Dichlorodifluoromethane (Difluorodichloromethane) <sup>h</sup>	1.0
Dieldrin <sup>h</sup>	0.00005
Dimethoate (Cygon) <sup>h</sup>	0.140
2,4-Dimethylphenol	0.40
1,4-Dioxane	0.003
Diphenamide	0.040
Ethion	0.035
Formaldehyde	0.030
Isopropyl N (3-Chlorophenyl) Carbamate (CIPC)	0.350
Malathion	0.160
Methyl Isobutyl Ketone (MIBK)	0.040



Methyl Parathion	0.030
Methyl-tert-butyl ether (MTBE) <sup>h,i</sup>	0.013
N-Nitrosodimethylamine (NDMA)	0.000002
Parathion	0.030
Pentachloronitrobenzene (Terrachlor)	0.0009
Phenol	0.0050 <sup>l</sup>
Tertiary butyl alcohol	0.012
1,2,3-Trichloropropane	0.000005
Trithion	0.0070

<sup>h</sup> Chemical is identified as "unregulated" for purposes of monitoring.

<sup>i</sup> MTBE also has a secondary MCL of 0.005 mg/L.

<sup>j</sup> Taste and odor threshold.

<sup>k</sup> Taste and odor threshold either for a single isomer or the sum of the two isomers.

<sup>l</sup> Taste and odor threshold for chlorinated systems.

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TABLE 5. CALIFORNIA DRINKING WATER  
UNREGULATED CHEMICALS REQUIRING MONITORING  
22 CCR §64450

Monitoring is required for chemicals in unregulated category a. If a system is determined to be vulnerable, monitoring is required for chemicals in unregulated categories b, c, or d.

Chemical	Unregulated category
<i>Inorganic Chemicals</i>	
Perchlorate <sup>m</sup>	d
<i>Organic Chemicals</i>	

# ATTACHMENT I

## LEASE

THIS IS A LEASE dated January 25, 1979 between 1) PAUL D. MYERS, Trustee, EBM-RT Trust; and 2) YVONNE SAMMANN BERRY, Trustee, MEBS-RT Trust

of 1) 1244 North Raymond Avenue in Fullerton, California 92631  
 of 2) 1611 6th Street in Coronado, California 92118  
 (herein called "Lessor", whether one or more), and SHELL OIL COMPANY, a Delaware corporation  
 with offices at 511 North Brookhurst Street in Anaheim,  
 California 92803 (herein called "Shell").

1. LEASE. Lessor hereby leases to Shell, and Shell hereby leases from Lessor, the following described land situated at S/W/C Venice and Sepulveda  
 in Culver City, County of Los Angeles, State of California :

## PARCEL I:

Lots 276 and 277 of Tract 6936, in the City of Culver City, County of Los Angeles, State of California, as per map recorded in Book 76, Page 34 of Maps, in the office of the County Recorder of said County.

EXCEPT northeasterly 5 feet.

## PARCEL II:

Lots 278, 279, 280, 281, and the west 5 feet of Lot 282 of Tract 6936, in the City of Culver City, County of Los Angeles, State of California, as per map recorded in Book 76, Page 34 of Maps, in the office of the County Recorder of said County.

EXCEPT northerly 5 feet of said land conveyed to City of Culver City;

together with all rights, privileges and appurtenances thereto (herein, with the land, collectively called "Premises").

1A. DEFINITION. SEE ATTACHED ADDENDUM.

2. TERM. The primary term of this Lease shall begin on the 1st day of August 1979, and shall end five ( 5 ) years after the date of completion of Shell's construction of an automobile service station on the Premises but not later than ( ) years and ( ) days after the beginning date. Shell shall have options to extend this Lease for five ( 5 ) additional period(s) of five ( 5 ) year(s) each, on the same covenants and conditions as herein provided, any one or more of which options Shell may exercise by giving Lessor notice at least forty-five days prior to the expiration of the primary term or the then-current extension (as the case may be). If Shell does not have or does not exercise any then-current option to extend, this Lease shall be automatically extended from year to year, on the same covenants and conditions as herein provided, unless and until either Lessor or Shell terminates this Lease at the end of the primary term or the then-current extension period or any subsequent year, by giving the other at least thirty days' notice.

3. RENT. SEE ATTACHED ADDENDUM.

~~Shell shall pay, as rent for each calendar month, the sum of~~  
 Dollars (\$ ), by check to the order of

~~in advance on or before the first day of each such month. However, rent shall not commence to accrue until the Premises are in Shell's possession, cleared and with the title clear and the legal permission in effect, all as provided in article 4. Rent for any period less than a month shall be prorated.~~

~~4. PERMITS TITLE POSSESSION. Lessor shall, at Lessor's expense, promptly apply for and diligently endeavor to obtain all necessary legal permission to use the Premises for, and to construct thereon, an automobile service station in accordance with Shell's plans and specifications. Within~~

~~( ) days after obtaining such permission, Lessor shall, at Lessor's expense clear the title to the Premises from all liens, encumbrances, restrictions and other defects, and deliver to Shell possession of the Premises, cleared of all structures, personal property and debris. In default of any of the foregoing, Shell may obtain such legal permission (in its or Lessor's name) and/or clear the title and/or take possession of and clear the Premises, and charge to Lessor all costs incurred thereby, or may terminate this Lease by giving Lessor notice.~~

4A. GASOLINE ALLOCATION. SEE ATTACHED ADDENDUM.

5. **USE OF PREMISES.** Shell shall have the rights, at Shell's expense: to enter the Premises, at any time after the date of this Lease, for the purpose of making investigations and surveys; to use the Premises for any lawful purpose; to construct and install on the Premises, and paint in colors of Shell's selection, an automobile service station, and any additional buildings, improvements and equipment (including advertising signs and billboards) that Shell may desire; and to make any alterations that Shell may desire in the Premises and the buildings, improvements and equipment at any time located thereon.

6. **CIVIL DISTURBANCE.** Shell may abate the rent hereunder for each day that Shell's construction of an automobile service station on the premises is prevented, delayed or interfered with by any riot, demonstration or other civil disturbance, or by picketing or blockading of the premises, or by violence or threats of violence to or other intimidation of any persons on or desiring to enter or leave the premises in connection with such construction; and if the construction is so prevented delayed or interfered with for ten consecutive days or for any twenty days, Shell may terminate this Lease forthwith by giving notice to Lessor.

SEE ATTACHED ADDENDUM.

7. **TAXES-LIENS.** ~~Shell shall pay all taxes on Shell's buildings, improvements, equipment and other property on the Premises, and all license, utilities and other such charges incurred by Shell's use of or operations on the Premises; and if any of such taxes or charges are assessed against and paid by Lessor, Shell shall reimburse Lessor therefor, upon Lessor's demand and presentation to Shell of receipted bills. All other taxes, assessments and charges on the Premises and Lessor's property thereon shall be paid by Lessor. If Lessor defaults at any time in any such payment or in the performance of the obligations of any mortgage or other lien affecting the Premises, Shell may remedy such default, in whole or in part, charge to Lessor all costs incurred thereby, and be subrogated to the rights of the holder of such mortgage or other lien.~~

8. **CHARGES.** All sums charged to Lessor by Shell hereunder shall be indebtedness of Lessor to Shell payable on demand. If any such indebtedness or any other indebtedness of Lessor to Shell is due at any time, Shell may, in addition to other remedies, withhold all or any part of the rent thereafter accruing and apply the same to the payment of such indebtedness. If all such indebtedness is not fully paid at the end of the primary term or any extension period, Shell may, at its option, extend this Lease on the same covenants and conditions as herein provided, until such indebtedness is fully paid by application of all rent thereto.

~~9. **PURCHASE OPTION.** At any time during the primary term, any extension period or any tenancy after either, Shell shall have the option to purchase the Premises for the sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), on the terms provided in article 11, which option Shell may exercise by notice to Lessor.~~

10. **PURCHASE REFUSAL.** If at any time during the primary term, any extension period or any tenancy after either, Lessor receives from a ready, willing and able purchaser an acceptable bona fide offer to purchase, or makes a bona fide offer to sell to such purchaser, the Premises or any part thereof or any property which includes all or part of the Premises: Lessor shall give Shell notice, specifying the name and address of the purchaser and the price and terms of the offer, accompanied by Lessor's affidavit that the proposed sale is in good faith. Shell shall thereupon have, in addition and without prejudice to its rights under article 9, the prior option to purchase the Premises or the part thereof or the entire property covered by such offer, at the price and on the terms of the offer but subject to the terms provided in article 11, which option Shell may exercise by giving Lessor notice within thirty days after Shell's receipt of Lessor's notice of the offer. Shell's failure at any time to exercise its option under this article shall not affect this Lease or the continuance of Shell's rights and options under this article or any other article hereof.

11. **PURCHASE PROCEDURE.** In Shell's notice exercising any purchase option herein, Shell shall designate an Escrow Agent; and within twenty days after receipt of such notice, Lessor shall deposit with Escrow Agent Lessor's recordable Warranty deed to Shell, in form satisfactory to it, of the property covered by the exercised option. Promptly thereafter, Lessor shall (or Shell may, for Lessor's account) order from the Title Company which Shell shall also have designated in its exercise notice, a report on Lessor's title to that property, looking to Title Company's issuance to Shell of an owner's policy of title insurance. Lessor shall clear the title of all liens, encumbrances, restrictions and other defects specified in that report. Upon receipt from Shell of the purchase price and notice that title is acceptable, Escrow Agent shall deliver to Shell the deed and to Lessor the purchase price, less the amounts of any liens subject to which Shell elected to accept title, and all documentary, transfer and like taxes not otherwise paid by Lessor. Taxes and rent shall be prorated as of the date of delivery of the deed. Upon receipt from Shell of notice that the title is not acceptable, Escrow Agent shall return to Lessor the deed; and this Lease shall continue in effect.

12. **LEASE REFUSAL.** If at any time during the primary term, any extension period or any tenancy after either, Lessor receives from a ready, willing and able lessee an acceptable bona fide offer, or makes a bona fide offer to such a lessee, to lease the Premises or any part thereof or any property which includes all or part of the Premises, for a term beginning after the termination of this Lease, Lessor shall give Shell notice thereof, specifying the name and address of the lessee and the term, rent and other provisions of the proposed lease, accompanied by Lessor's affidavit that such lease is in good faith. Shell shall thereupon have the prior option to lease the Premises or the part thereof or the entire property covered by the offer, for the term, at the rent and on the other provisions specified in such notice, which option Shell may exercise by giving Lessor notice within thirty days after Shell's receipt of Lessor's notice of the offer; and promptly upon Shell's submission to Lessor of a written lease with such term, rent and other provisions, Lessor shall execute the same with Shell in recordable form. Shell's failure at any time to exercise its option under this article shall not affect this Lease or the continuance of Shell's rights and options under this article or any other article hereof.

13. **ASSIGNMENT-SUBLEASING.** Shell may at any time assign this Lease or sublease all or any part of the Premises, but shall not be relieved thereby of any of its obligations hereunder.

14. **TERMINATION-ABATEMENT.** If, without Shell's fault, the operation on the Premises of an automobile service station becomes illegal or is prevented or substantially impaired for more than ninety days by any act or omission of any governmental authority, or by the closing, relocation, change of grade or alteration of, or rerouting of traffic on or away from, any street or highway adjoining the Premises, or by the deprivation or limitation of any access thereto or therefrom; or if all or any part of the Premises

...in the event of a condemnation proceeding: ...thirty days' notice; provided that, in the event ...any time not later than ninety days after ...the condemnation proceeding becomes ...shall immediately abate, or if only partial ...operation of the service station as ...possession of the Premises is taken. ...the Lease to terminate, nor any abatement ...then accrued or thereafter to accrue, in any ...damages resulting from any other of the events

~~...shall have the unconditional right to terminate this Lease at ...~~

**16. REMOVAL-SURRENDER-FORFEITURE.** All buildings, improvements, equipment and other prop-  
erty constructed, installed or placed on the Premises by Shell or acquired by Shell, at any time during  
the term of this or any previous Lease or any tenancy thereafter; shall be and remain Shell's  
property, and Shell shall have the right to remove any or all of the same from the Premises at any time  
during, and within sixty days after any termination of, this Lease or any tenancy thereafter. At any  
termination of this Lease or any tenancy thereafter, Shell shall surrender the Premises to Lessor, subject  
to ordinary wear and tear and to Shell's rights under articles 5 and 16. Any holdover by Shell after any  
termination of this Lease shall create no more than a month-to-month tenancy at the rent and on all other  
applicable provisions hereof. If forfeiture of this Lease is permitted by law for Shell's default, Lessor shall  
not be entitled to declare any such forfeiture unless Lessor has given Shell notice of such default and  
Shell has failed to remedy same within thirty days after receipt of such notice.

**17. WARRANTY OF TITLE.** Lessor covenants that Lessor is well seized of and has good right to  
lease the Premises, will warrant and defend the title thereto, and will indemnify Shell against any damage  
and expense which Shell may suffer by reason of any lien, encumbrance, restriction or defect in the title  
to or description herein of the Premises. If at any time Lessor's title or right to receive rent hereunder  
is disputed, or there is a change of ownership of Lessor's estate by act of the parties or operation of law,  
Shell may withhold rent thereafter accruing until Shell is furnished proof satisfactory to it as to the party  
entitled thereto.

**18. NOTICES.** Notices hereunder shall be given only by certified or registered letter or telegram  
and shall be deemed given when the letter is deposited in the mail or the telegram with the telegraph  
company, postage or charges prepaid, and addressed to the party for whom intended at such party's  
address first herein specified, or at such other address as such party may have substituted therefor by  
notice so given to the other.

**18A. EXISTING LEASE.** SEE ATTACHED ADDENDUM.  
**19. ENTIRETY-EXECUTION-SUCCESSION.** This Lease merges and supersedes all prior representations  
and agreements, and constitutes the entire contract, between Lessor and Shell concerning the leasing of  
the Premises and the consideration therefor. Neither this Lease nor any agreement amending, supple-  
menting or terminating this Lease shall be binding on Shell unless and until it is signed in Shell's behalf  
by a representative duly authorized by its Board of Directors. This Lease and all options herein shall bind  
and inure to the benefit of the heirs, administrators, executors, successors and assigns of Lessor, and the  
successors and assigns of Shell.

EXECUTED as of the date first herein specified.

Witnesses to execution by Lessor:

Subscribed and sworn to before me this  
6th day of March 1979  
Margaret A. Ballard Notary Public  
In and for the County of Orange, State of California

Witnesses to execution by Shell:



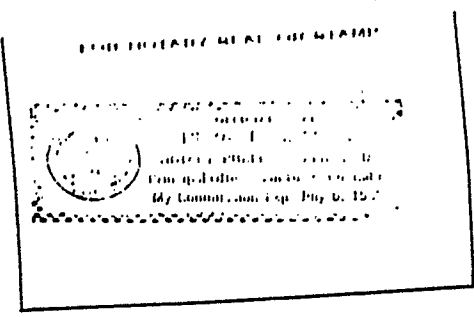
Paul D. Myers, Trustee (Seal)  
YVONNE SAMMANN BERRY, Trustee (Seal)

SHELL OIL COMPANY

By *[Signature]*

STATE OF CALIFORNIA  
COUNTY OF SAN DIEGO  
On March 14, 1979  
I, the undersigned, a Notary Public in and for said County and State,  
personally appeared *[Signature]*

known to me  
to be the person whose name is subscribed to the foregoing instrument and acknowledged that he executed the same  
*[Signature]*  
Reva J. Sparks



Misc-106 (G.S.) Ask  
Single

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# ADDENDUM

To, and part of, printed LEASE dated January 25, 1976  
 PAUL D. MYERS, Trustee EBM-RT; and  
 Between YVONNE SAMMANN BERRY, Trustee, MEBS-RT Trust ("Lessor"  
 and SHELL OIL COMPANY ("Shell"), of premises situated at S/W/C Venice and Sepulveda  
in Culver City, California

- A. Confirming that article(s) 2. TERM has/~~has~~  
 been modified on the face thereof.  
 B. Confirming that article(s) 4. PERMITS-TITLE-POSSESSION, 9. PURCHASE OPTION, 15. SPECIAL TERMINATION have  
 been wholly deleted on the face thereof.  
 C. Confirming that article(s) 3. RENT, 7. TAXES-LIENS have  
 been wholly deleted on the face thereof; and substituting therefor the article(s) set forth  
 in this Addendum, bearing the same respective number(s).  
 D. Adding thereto article(s) 1A. DEFINITION, 4A. GASOLINE ALLOCATION, 18A. EXISTING LEASE set forth in  
 this Addendum.

1A. DEFINITION. Wherever used in this Lease, "automobile service station" means any establishment of such type as Shell may select, having as its major purpose the retail sale of motor gasolines.

3. RENT. Shell shall pay, as rent for each calendar month during the term of this Lease, the sum of One Thousand Two Hundred Forty Four and 00/100 Dollars (\$1,244.00), by check, in advance on or before the first day of each month; provided, however, that the rent shall be increased or decreased, as the case may be, at the beginning of each 3rd year ("Effective Date") of the term of the Lease by the same percentage by which the Current Index is more or less than the Base Index (as those terms are hereinafter defined): but the monthly rent shall never be less than (a) during the primary period, the sum of One Thousand and 00/100 (\$1,000.00) and (b) during the respective option periods as follows: the first, the sum of One Thousand One Hundred and 00/100 Dollars (\$1,100.00), the second, the sum of One Thousand Two Hundred and 00/100 Dollars (\$1,200.00), the third, the sum of One Thousand Three Hundred and 00/100 (\$1,300.00), the fourth, the sum of One Thousand Four Hundred and 00/100 Dollars (\$1,400.00), and the fifth, the sum of One Thousand Five Hundred and 00/100 Dollars (\$1,500.00). Rent for any period less than a month shall be prorated.

As used herein: "Current Index" means, for each Effective Date, the beginning of each 3rd year, the average of the Consumer Price Index for all urban consumers (all items, Los Angeles, Long Beach, Anaheim, California) for each of the thirty-six (36) calendar months last preceding such Effective Date, as published by the U. S. Bureau of Labor Statistics, or any revision or equivalent of such Index hereafter published by the Bureau; or if such Index (or revision or equivalent) ceases to be so published, any other substantially equivalent index generally recognized as authoritative, and mutually agreeable to Lessor and Shell; provided that any such alternative index (including any revision or equivalent published by that Bureau) shall be appropriately reconciled to the 1967 Base 100; and "Base Index" means Consumer Price Index for all urban consumers (all items, Los Angeles, Long Beach, Anaheim, California) for July 1979.

The rent as set forth herein shall be payable as follows: two-thirds (2/3) to PAUL D. MYERS, Trustee EBM-RT Trust, 1244 N. Raymond Avenue, Fullerton, California 92631 and one-third (1/3) to YVONNE SAMMANN BERRY, Trustee, MEBS-RT Trust, 1611-6th Street, Coronado, California 92118.

4A. GASOLINE ALLOCATION. Shell shall be exclusively entitled to apply, and shall promptly apply, to the Federal Energy Administration (or any agency that may succeed to its jurisdiction) for an allocation entitlement, satisfactory to Shell, of motor gasolines for the prospective automobile service station on the Premises. If, notwithstanding diligent effort to do so, Shell does not obtain such allocation within 180 days after the beginning date of this Lease, Shell may terminate this Lease by giving Lessor at least 90 days' notice.

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SHELL OIL COMPANY

*[Signature]*

*Paul D. Myers*  
*Yvonne Sammann Berry*

# ADDENDUM

To, and part of, printed LEASE dated January 25, 1979,  
 PAUL D. MYERS, Trustee ERM-RT Trust; and  
 Between YVONNE SAMMANN BERRY, Trustee, MEBS-RT Trust ("Lessor")  
 and SHELL OIL COMPANY ("Shell"), of premises situated at S/W/C Venice and Sepulveda  
in Culver City, California;

- A. Confirming that article(s) 2. TERM has ~~XXXX~~  
 been modified on the face thereof;  
 B. Confirming that article(s) 4. PERMITS-TITLE-POSSESSION, 9. PURCHASE OPTION, 15. SPECIAL TERMINATION ~~has~~ have  
 been wholly deleted on the face thereof.  
 C. Confirming that article(s) 3. RENT, 7. TAXES-LIENS ~~has~~ have  
 been wholly deleted on the face thereof; and substituting therefor the article(s) set forth  
 in this Addendum, bearing the same respective number(s).  
 D. Adding thereto article(s) 1A. DEFINITION, 4A. GASOLINE ALLOCATION, 18A. EXISTING LEASE set forth in  
 this Addendum.

7. TAXES-LIENS. Shell shall pay (a) all taxes, assessments and other governmental charges on the Premises which are allocable to the term of this Lease, and the bills for which have been presented to Shell, and (b) all taxes on Shell's buildings, improvements, equipment and other property on the Premises, and license, utilities and other such charges incurred by Shell's use of or operations on the Premises. Shell shall have the right to contest, in its and/or Lessor's name, any assessment for and/or levy of general real property taxes on the Premises; and at Shell's request Lessor shall execute such documents, make such appearances and do such other things as Shell may reasonably request in connection with the prosecution of any such contest (in default of any of which, Shell shall have no further obligation to pay such taxes, assessments and charges); however, in the event Lessor is unable to comply with Shell's request, Lessor herein gives Shell the right of power-of-attorney to execute all documents and take all legal steps on behalf of Lessor in connection with the prosecution of such contest. If Lessor defaults at any time in any payment which Lessor is obligated to make under this article, or in performance of the obligation of any mortgage or any other lien affecting the Premises, Shell may remedy such default, in whole or in part, charge to Lessor all costs incurred thereby, and be subrogated to the rights of the holder of such mortgage or other lien.

18A. EXISTING LEASE. This Lease terminates and supersedes, effective as of the beginning date of its primary term, the existing Leases of the Premises between Lessor's predecessor and Shell, dated November 3, 1949 and July 15, 1958, and all amendments and supplements thereto, and recorded respectively by Memorandums in Book 32424 Page 340 and Book M-324 Page 294, in the office of the County Recorder of Los Angeles County.

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(5)

SHELL OIL COMPANY

By Shepherd

Paul D. Myers  
Yvonne S. Berry  
 LESSOR

AGREEMENT AMENDING LEASE

THIS IS AN AGREEMENT dated April 14, 1982 between 1) PAUL D. MYERS, Trustee, EBM-RT Trust; and 2) YVONNE SAMMANN BERRY, Trustee, MEBS-RT Trust of 1) 1244 North Raymond Avenue and 2) 1611 6th Street in 1) Fullerton, California 92631 and 2) Coronado, California 92118 (herein called "Lessor", whether one or more), and SHELL OIL COMPANY, a Delaware corporation with offices at 511 North Brookhurst Street in Anaheim, California 92803 (herein called "Shell").

AMENDING the Lease dated January 25, 1979 between Lessor and Shell, as heretofore amended, covering Premises located at S/W Venice and Sepulveda in Culver City, Los Angeles County, California, which is recorded by Memorandum in Official Records and Document #79-1185184, in the Office of County Recorder of that County.

1. Effective as of August 1, 1981, Article 3 RENT of the Lease is amended to read and provide, in its entirety, as follows:

3. RENT. Shell shall pay, as rent for each calendar month:
- (a) during the primary term, the sum of Two Thousand One Hundred and No/100 Dollars (\$2,100.00), and (b) during each of the optional extension periods as follows: the first, the sum of Three Thousand and No/100 Dollars (\$3,000.00), the second, the sum of Four Thousand and No/100 Dollars (\$4,000.00), the third, the sum of Five Thousand One Hundred and No/100 Dollars (\$5,100.00), the fourth, the sum of Six Thousand One Hundred and No/100 Dollars (\$6,100.00), the fifth, the sum of Seven Thousand Five Hundred and No/100 Dollars (\$7,500.00). Rent for any other period less than a month shall be prorated.

The rent as set forth herein shall be payable as follows: two-thirds (2/3) to PAUL D. MYERS, Trustee EBM-RT Trust, 1244 North Raymond Avenue, Fullerton, California 92631 and one-third (1/3) to YVONNE SAMMANN BERRY, Trustee, MEBS-RT Trust, 1611 6th Street, Coronado, California 92118.

2. The Lease, as hereby amended, is ratified and continued.

3. This Agreement shall bind and benefit Lessor's heirs, successors and assigns, and Shell's successors and assigns.

EXECUTED as of the date first herein specified.

WITNESSES to Lessor's execution:

[Signature]  
[Signature]

Paul D. Myers (Seal)  
PAUL D. MYERS, Trustee  
Yvonne Sammann Berry  
YVONNE SAMMANN BERRY, Trustee



WITNESSES to Shell's execution:

J. V. Larney  
President

SHELL OIL COMPANY

By T. L. Clements  
T. L. CLEMENTS  
MANAGER REAL ESTATE SERVICES  
CORPORATE REAL ESTATE

(Add Acknowledgement)

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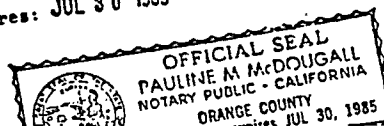
STATE OF CALIFORNIA  
COUNTY OF ORANGE

SS.

On this 15th day of April, 1982, before me,  
Pauline M. McDougall, a notary public in and for the said County  
and State, residing therein, duly commissioned and sworn, personally appeared  
Paul D. Myers, known to me to be the person whose name is sub-  
scribed to the within instrument, and acknowledged to me that he executed the  
same.

In witness whereof, I have hereunto set my hand and affixed my official  
seal the day and year in this certificate first above written.

My Commission expires: JUL 30 1985



*Pauline M. McDougall*  
Notary Public

THE STATE OF TEXAS

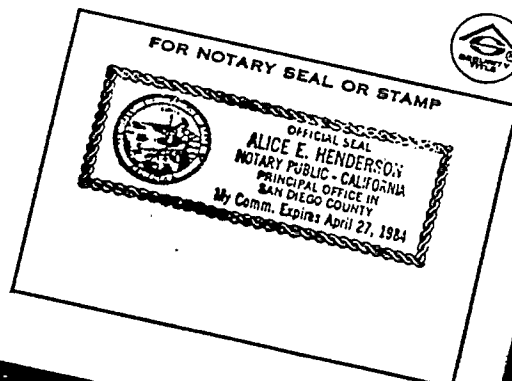
On this 17th day of May, 1982, before me,  
P.A. Harris, a Notary Public in and for  
said State, residing therein, duly commissioned and sworn, personally  
appeared T. L. Clements, known to me to be the Manager Real Estate  
Services, Corporate Real Estate of Shell Oil Company, the corporation  
that executed the within instrument, and acknowledged to me that  
such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my  
official seal the day and year in this certificate first above  
written.

P.A. Harris P.A. HARRIS  
Notary Public Notary Public in and for the State of  
My Commission Expires August 11, 1984

Misc. 108 (GS) Act. Individual (Rev. 9-58)

STATE OF CALIFORNIA  
COUNTY OF SAN DIEGO  
On April 14, 1984 } SS.  
the undersigned, a Notary Public in and for said County and State,  
personally appeared  
YVONNE S. BERRY  
to be the person whose name is known to me  
within instrument and acknowledged that she executed the  
same.  
Alice E. Henderson  
Alice E. Henderson  
Name (Typed or Printed)  
Notary Public in and for said County and State



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